

a transmission member disposed on the rotor for rotation therewith, the transmission member having a tapered portion varying in thickness along a direction generally perpendicular to a longitudinal axis of the rotor;

a moving body having an end portion in contact with the transmission member for undergoing linear movement in a direction generally parallel to the longitudinal axis of the rotor in accordance with rotation of the transmission member, the moving body having a tapered portion contacting the tapered portion of the transmission member, the tapered portion of the moving body having a thickness which varies along a direction generally perpendicular to the longitudinal axis of the rotor; and

a pressurizing mechanism pressing the moving body into pressure contact with the transmission member.

42. (Twice Amended) A linear motion mechanism comprising:

a supersonic motor having a rotor which is rotationally driven by vibration of a vibrating body having a piezoelectric element;

a first transmission member connected to the rotor for rotation therewith;

a second transmission member having a first end portion contacting the first transmission member and a second end portion, the second transmission member being

mounted for undergoing pivotal movement about a pivoting point disposed between the first and second end portions during rotation of the first transmission member;

a moving body contacting the second end portion of the second transmission member to undergo linear movement in a direction crosswise to a longitudinal axis of the rotor in accordance with rotation of the first transmission member and pivotal movement of the second transmission member; and

a pressurizing mechanism pressing the moving body into pressure contact with the second end portion of the second transmission member.

49. (Twice Amended) A linear motion mechanism comprising:

a supersonic motor having a rotor which is rotationally driven by vibration of a vibrating body having a piezoelectric element;

a rotational body connected to the rotor for rotation therewith, the rotational body having a tapered portion varying in thickness along a direction generally perpendicular to a longitudinal axis of the rotor;

a moving body having a projecting portion contacting the tapered portion of the rotational body to undergo linear movement in a direction generally parallel to the longitudinal axis of the rotor in accordance with rotation of the rotational body;

a pressurizing mechanism pressing the projecting portion of the moving body into pressure contact with the tapered portion of the rotational body;

a support member for supporting the supersonic motor; and

a guide member mounted on the support member for guiding the linear movement of the moving body.

50. (Twice Amended) A linear motion mechanism comprising:

a supersonic motor having a rotor which is rotationally driven by vibration of a vibrating body having a piezoelectric element;

a support member for supporting the supersonic motor;

a first pressing member pressing the rotor into pressure contact with the vibrating body;

a rotational body connected to the rotor for rotation therewith, the rotational body having a tapered portion varying in thickness along a direction generally perpendicular to a longitudinal axis of the rotor;

a moving body having a projecting portion contacting the tapered portion of the rotational body to undergo linear movement toward and away from the support member in a direction generally parallel to the longitudinal axis of the rotor in accordance with rotation of the rotational body;

a moving member connected to the moving body for undergoing linear movement therewith;

a guide member mounted on the support member for guiding the linear movement of the moving body and the moving member; and

a second pressing member pressing the projecting portion of the moving body into pressure contact with the tapered portion of the rotational body.

IN THE ABSTRACT:

Delete the abstract now of record and insert therefor the new abstract submitted herewith on a separate sheet.

ADDITIONAL FEES:

No additional fees are believed required; however, should it be determined that a fee is due, authorization is hereby given to charge any such fee to our Deposit Account No. 01-0268.

REMARKS

In the last Office Action, the Examiner rejected claims 29-50 under 35 U.S.C. §112, second paragraph, for indefiniteness. Claims 29-37, 39-41 and 46-48 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent